DOE/EIA-0218(91-48)

# Weekly Coal Production

Production for Week Ended: November 23, 1991



Energy Information Administration



### **Preface**

The Weekly Coal Production (WCP) report provides weekly estimates of U.S. coal production by State. Supplementary data are usually published monthly in two supplements: the Coal Exports and Imports Supplement and the Domestic Market Supplement. This week's Coal Exports and Imports Supplement contains detailed monthly data on U.S. coal and coke exports and imports. The Domestic Market Supplement contains detailed monthly electric utility coal statistics, by Census Division and State, for generation, consumption, stocks, receipts, sulfur content, prices, and the origin and destination of coal shipments. This supplement also contains summary-level, monthly data for all coal-consuming sectors on a quarterly basis.

Preliminary coal production data are published quarterly, based on production data collected using Form EIA-6, "Coal Distribution Report." Based on 1988 through 1990 data, the coal production estimation error for a quarter at the national level (i.e., the difference between the sum of the weekly estimates for a quarter and the quarterly EIA-6 preliminary data) ranges from 1 percent to 4 percent for 1988, 1 percent to 2 percent for 1989, and 0.3 percent to 3 percent for 1990.

Final coal production data are published annually, based on the EIA-7A coal production survey. Based on 1988 through 1990 data, the revision error for a

quarter at the national level (i.e., the difference between the EIA-6 preliminary data and the EIA-7A final data) ranges from 0.02 percent to 0.08 percent for 1988, 0.09 percent to 0.14 percent for 1989, and 0.01 percent to 0.05 percent for 1990. Usually the EIA-7A coal production data are higher than the EIA-6 coal production data, due to differences in the threshold reporting requirements.

This publication is prepared by the Survey Management Division; Office of Coal, Nuclear, Electric and Alternate Fuels; Energy Information Administration (EIA) to fulfill its data collection and dissemination responsibilities as specified in the Federal Energy Administration Act of 1974 (P.L. 93-275) as amended. Weekly Coal Production is intended for use by industry, press, State and local governments, and consumers. Other publications that may be of interest are the quarterly Coal Distribution, the Quarterly Coal Report, Coal Production 1990, and Coal Data: A Reference.

This publication was prepared by Wayne M. Watson under the direction of Mary K. Paull, Team Leader, Coal Data Systems, and Noel C. Balthasar, Chief, Coal and Uranium Data Systems Branch. Specific information about the *State Coal Profile: Utah* may be obtained from Michelle D. Bowles at (202) 254-5378 or Eugene R. Slatick at (202) 254-5384. Questions on energy statistics should be directed to the National Energy Information Center (NEIC) at 202/586-8800.

Photo Credit:

Cyprus Plateau Mining Company State Coal Profile

Distribution Category UC-98

Released for printing November 29, 1991

This report was prepared by the Energy Information Administration, the independent statistical and analytical agency within the Department of Energy. The information contained herein should not be construed as advocating or reflecting any policy of the Department of Energy or any other organization.

## **Contents**

Summary	
Figure 1. Coal Production	
Table 1. Coal Production	
Table 2. Coal Production by State	
Table 3. Coal Exports and Imports, 1985	-1991 4
Table 4. Coal Exports, September 1991	
Table 5. Average Price of Coal Exports,	September 1991 $\dots 6$
Table 6. Steam Coal Exports, September	1991
Table 7. Average Price of Steam Coal B	ports, September 1991
Table 8. Metallurgical Coal Exports, Ser	ember 1991
Table 9. Average Price of Metallurgical	Coal Exports, September 1991
Table 10. Coal Exports by Customs Dist	ct, September 1991
Table 11. Coke Exports, September 1991	
Table 12. Coal Imports, September 1991	
Table 13. Average Price of Coal Imports	September 1991
Table 14. Coal Imports by Customs Dist	ct, September 1991
Table 15. Coke Imports, September 1991	14

## **Summary**

U.S. coal production in the week ended November 23, 1991, as estimated by the Energy Information Administration, totaled 21 million short tons. This was 7 percent more than in the previous week, and nearly 28 percent higher than in the comparable week in 1990, which included the Thanksgiving Day holiday. Production east of the Mississippi River totaled 13 million short tons, and production west of the Mississippi River totaled 9 million short tons.

U.S. coal exports in September 1991 totaled 11 million short tons, the same as in August 1991 and 3 percent higher than in September 1990. This raised the total coal exports in the first nine months of 1991 to 80 million short tons, the same level as in the comparable period of last year. The leading destinations for coal exports were Japan, Italy, France, and the Netherlands, together receiving 40 percent of the total exports. Compared to the same period in 1990, shipments to Japan and Italy were down by 2 and 4 percent, respectively, while those to France and the Netherlands were up by 28 and 17, percent respectively.

Metallurgical coal exports in the first nine months of 1991 totaled 49 million short tons, 1 million short tons higher than in the comparable period of 1990. Japan continued as the largest importer of U.S. metallurgical coal, accounting for 7 million short tons of coal. This was 1 million short tons less than in the first nine months of 1990, due in part to increased competition from Australia and Canada. Brazil, the second-largest destination of U.S. metallurgical coal, received 5 million short tons. Other large importers of U.S. metallurgical coal included France, Italy, and Belgium and Luxembourg. Compared with the first nine months of 1990, Brazil and France showed the largest tonnage increases, almost 1 million short tons each.

Steam coal exports in the first nine months of 1991 totaled 31 million short tons, the same amount as in the corresponding period of 1990. The principle destinations for steam coal were Italy, the Netherlands, and Canada, each receiving 4 million short tons through September 1991. Italy and the Netherlands increased their U.S. steam coal imports by 15 and 25 percent, respectively, compared with the first nine months of 1990, while Canada on the other hand, decreased by over 50 percent. The decrease in U.S. exports to Canada was mainly a result of the high level of U.S. steam coal imports in 1990 that were used to build-up stocks in anticipation of increased electricity demand, to cover nuclear plants outages due to routine maintenance, and some test shipments of low-sulfur coal from the West. Taiwan was the leading Asian destination, with 3 million short tons, a decline of 14 percent from 1990.

U.S. coal exports from January through September 1991 were valued at more than \$3 billion, based on an average price of \$42.85 per short ton. Norfolk, Virginia was the leading port of export, handling 55 percent of all U.S. coal exports.

Coal imports into the United States in September 1991 totaled 387 thousand short tons, twice as much as was imported in September 1990. The total amount of coal imported during the first nine months of 1991 was almost 3 million short tons, an increase of 38 percent over the 1990 total. Colombia was the leading source of imported coal, accounting for 58 percent of the total. Canada ranked second with over one-quarter of the total coal imported. Based on an average price of \$33.11 per short ton, total coal imports were valued at \$88 million.

Figure 1. Coal Production

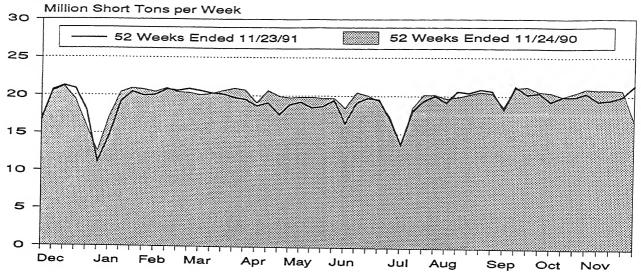


Table 1. Coal Production

	Week Ended			52 Weeks Ended		
Production and Carloadings	11/23/91	11/16/91	11/24/90	11/23/91	11/24/90	Percent Change
Production (Thousand Short Tons)						
Bituminous Coal' and Lignite Pennsylvania Anthracite U.S. Total	45	19,949 55 20,004	16,731 48 16,779	1,001,328 2,727 1,004,055	1,020,277 3,543 1,023,820	-1.9 -23.0 -1.9
Railroad Cars Loaded	140,993	131,933	109,193	6,508,707	6,658,804	-1.9

'Includes subbituminous coal.

Notes: 1991 data are preliminary. Totals may not equal sum of components because of independent rounding. Sources: Association of American Railroads, Transportation Division, Weekly Statement CS-54A; Energy Information Administration, Form EIA-6, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; and State mining agency

Table 2. Coal Production by State (Thousand Short Tons)

_		Week Ended	
Region and State	11/23/91	11/16/91	11/24/90
ituminous Coal <sup>1</sup> and Lignite			
East of the Mississippi	12,665	12,042	8,835
Alabama	652	599	420
Illinois	1,267	1,165	1,122
Indiana	646	665	527
Kentucky	3,460	3,189	2,348
Kentucky, Eastern	2,479	2,244	1,701
Kentucky, Western	982	945	647
Maryland	78	71	45
Ohio	551	607	475
Pennsylvania Bituminous	1,226	1,348	848
Tennessee	103	93	70
Virginia	948	858	670
West Virginia	3,733	3,447	2,309
West of the Mississippi	8.687	7.907	7,897
Alaska	41	39	40
Arizona	246	230	216
Arkansas	1	1	1
Colorado	390	396	290
lowa	7	7	230
Kansas	9	10	10
Louisiana	70	69	40
Missouri	53	49	40
Montana	823	723	005
New Mexico	545	467	
North Dakota	623	547	
Oklahoma	49	49	
Texas	1,183	1,106	
Utah	449	460	
Washington	100	94	
Wyoming	4,098	3,661	
	4,030	3,001	
Bituminous Coal <sup>1</sup> and Lignite Total .	21,352		
Pennsylvania Anthracite	<sup>2</sup> 45		
J.S. Total	21,397		

<sup>&</sup>lt;sup>1</sup>Includes subbituminous coal.

Notes: 1991 data are preliminary. Totals may not equal sum of components because of independent rounding. Sources: Association of American Railroads, Transportation Division, Weekly Statement CS-54A; Energy Information Administration, Form EIA-6, "Coal Distribution Report"; Form EIA-7A, "Coal Production Report"; and State mining agency coal production reports.

Table 3. Coal Exports and Imports, 1982-1991 (Thousand Short Tons and Dollars per Short Ton)

			Exp	orts			lmp	orts
	Metal	urgical	Ste	am¹	To	otal		_
Year and Month	Quantity	Average Price <sup>2</sup>	Quantity	Average Price <sup>2</sup>	Quantity	Average Price <sup>2</sup>	Quantity	Average Price
1982	64,585	\$61.07	41,692	\$49.11	106,277	\$56.37	742	\$30.40
1983	49,964	55.49	27,807	46.18	77,772	52.16	1,271	33.59
1984	56,975	52.41	24,508	46.77	81,483	50.72	1,286	35.37
1985		50.46	32,367	43.92	92,680	48.18		
1986	-	47.81	-		•		1,952	36.04
1987			30,541	42.60	85,518	45.95	2,212	36.02
		44.49	27,928	39.60	79,607	42.77	1,747	32.04
1988	61,950	44.17	33,073	38.59	95,023	42.23	2,134	29.96
January	4,488	43.92	1 010	00.00		44		
February	5,298	43.92 44.32	1,818 1,450	36.29 37.14	6,306 6,749	41.72	66	36.14
March	6,163	44.17	2,212	37.14 36.98	6,748 8,375	42.78	131	31.89
April	6,061	44.08	3,042	38.46	9,104	42.27 42.20	334	33.86
May	6,303	45.40	3,381	37.40	9,685	42.61	158 312	31.46 32.19
June	5,598	45.82	4,059	38.14	9,657	42.59	218	39.04
July	3,881	45.77	2,328	37.95	6,209	42.84	375	36.65
August	4,925	46.09	3,197	37.30	8,122	42.63	247	33.85
September October	5,754	45.94	3,907	37.31	9,661	42.45	303	33.64
November	5,922 6,026	45.50 45.01	3,371	37.97	9,293	42.77	160	33.20
December	4,710	45.81 45.65	3,743	38.05	9,768	42.84	245	31.54
Total	65,128	45.05 45.19	3,179 35,687	37.66 <b>37.64</b>	7,888 <b>100,81</b> 5	42.43 <b>42.52</b>	303 <b>2,851</b>	35.09 <b>34.14</b>
1990					,	12.02	2,001	34.14
January	4,901	45.72	2,547	37.29	7,447	42.04	475	00.04
February	4,381	45.92	1,862	36.36	6,243	42.84 43.07	175	33.01
March	6,254	45.78	2,439	38.36	8,693	43.70	268 292	35.91
April	4,754	45.95	3,836	38.60	8,590	42.67	182	35.54 31.45
May June	5,643 5,600	46.81	4,184	36.50	9,827	42.42	144	34.08
July	5,699 5,495	46.35	3,616	36.35	9,316	42.47	348	34.65
August	5,598	46.82 46.59	3,698	35.69	9,194	42.34	200	29.58
September	5,567	46.70	4,467	37.57	10,065	42.59	120	35.72
October	4,471	47.06	4,671 4,286	35.89	10,238	41.76	194	32.31
November	5,805	46.42	3,816	36.41 36.88	8,756	41.85	284	41.32
December	4,890	48.07	2,923	36.32	9,621	42.63	224	32.86
Total	63,459	46.51	42,345	36.81	7,813 <b>105,804</b>	43.67 <b>42.63</b>	268	33.40
1991					100,004	42.03	2,699	34.45
January	3,853	47.87	2,361	36.82	0.044			
February	6,113	47.14	2,013	39.67	6,214	43.67	263	32.36
March	5,178	47.69	2,799	38.80	8,127 7,977	45.29	429	34.87
April	4,773	46.45	2,145	39.17	6,917	44.57	246	33.12
June	6,442	46.72	3,576	37.56	10,018	44.19 43.45	198	32.09
July	4,838	45.53	4,441	37.18	9,278	43.45 41.54	248 284	39.50
August	5,485 6 310	45.05	4,614	36.78	10,099	41.27	284 348	32.07
September	6,318 6,092	46.39	4,223	37.06	10,541	42.65	248	33.66 20.57
	·	44.61	4,465	35.14	10,557	40.61	387	29.57 30.67
991 Year to Date	49,092	46.33	30,637	37.27	70 700			30.67
990 Year to Date	48,293	46.31	31,320	36.91	79,729 79,612	42.85	2,652	33.11
			,	00.31	79,613	42.61	1,923	33.77

Includes bituminous, subbituminous, lignite, and anthracite.

Average price of all coal exports in this category.

Note: Total may not equal sum of components because of independent rounding.

Source: Bureau of the Census, U.S. Department of Commerce, "Monthly Report EM 522" and "Monthly Report IM 145."

Table 4. Coal Exports, September 1991 (Short Tons)

					Year to Date	
Continent and Country of Destination	September 1991	August 1991	September 1990	1991	1990	Percent Change
North America Total	1,117,956	898,897	1,826,438	6.300.159	44.540.440	
Canada'	1,112,977	818,014	1,767,566		11,519,119	-45.3
Dominican Republic	.,,	33.069	20,744	6,113,965	11,254,980	-45.7
Jamaica		30,009	20,744	70,799	62,219	13.8
Mexico	4,689	47,320	38.027	36,503	34,127	7.0
Other <sup>2</sup>	290	494	36,027 101	76,386 2,506	165,200 2,593	-53.8
South America Total	700 000			•	2,595	-3.4
Argentina	729,302	681,578	733,475	5,771,619	5,095,604	13.3
Brazil	89,595	70,571	175,405	429,422	501,882	-14.4
Chile	639,610	611,007	521,991	5,180,690	4,244,871	22.0
	79	-	35,960	135,037	318,232	-57.6
	18	-	119	26,470	30,619	-13.6
Europe Total	6,592,134	6,517,718	5,205,141	49,401,248	44,469,037	11.1
Albania	-	22,094	23,553	112,152	116,453	-3.7
Belgium & Luxembourg	687,188	794,239	767,225	5,872,029	6,703,808	-12.4
Bulgaria	110,748	52,911	-	727,915	87,955	NM
Denmark	829,459	543,257	269,938	3,473,967	2,338,433	48.6
Finland	47,909	111,868		349,037	95,259	266.4
France	1,771,360	1,248,216	390,778	7,311,086	5,702,340	28.2
Ireland	78,708	225,480	156,622	1,008,693	1,088,942	-7.4
Italy	638,305	869,530	816,272	8,337,550	8,684,317	-4.0
Netherlands	756,113	811,989	999,727	7,116,551	6,062,759	-4.0 17.4
Norway	12,763	22,596	9,943	166,549	133,170	25.1
Portugal	77,603	105,471	154,111	1,024,105	1,362,113	
Romania	•	57,891	206,716	924,102		-24.8
Spain	609,708	278,424	231,374	3,669,306	1,521,691	-39.3
Sweden	186,000	64,441	106,445	801,552	2,784,561	31.8
Turkey	,	569,334	290,534	1,780,607	523,828	53.0
United Kingdom	340.392	537,306	521.796		1,833,567	-2.9
Germany, FR	284,494	88,078	183,342	4,739,836	3,809,642	24.4
Yugoslavia	155,990	58.644	76,765	1,011,994	896,764	12.8
Other <sup>2</sup>	5,394	55,949	76,765	888,689	689,352	28.9
	0,004	55,545	-	85,528	34,083	150.9
Asia Total	1,919,273	2,172,464	2,284,267	16,504,041	16,945,789	-2.6
China (Taiwan)	467,018	508,047	568,247	3,252,096	3,701,551	-12.1
Hong Kong	-	122,276	261	464,979	119,553	288.9
Israel	-	134,304	134,183	541,943	638,996	200.5
Japan	1,122,503	1,066,966	1,122,057	9,376,485	9.534.824	
Korea, Republic of	329,605	339,655	436,494	2,858,343	2,925,794	
Other <sup>2</sup>	147	1,216	23,025	10,195	2,925,794 25,071	
Oceania & Australia Total	39	19	137		20.	
Africa Total	198,237	270,568				
Algeria	63,231	94,857				
Egypt	00,201	102,631				
Morocco	135,006	33,705				
Other <sup>2</sup>	.00,000	39,375				
	40 EEC 044	•				
Total	10,556,941	10,541,244				

MPercent change calculation not meaningful as value is greater than 500. Based on the U.S.—Canada Free Trade Agreement, as of January 1990, th U.S. exports to Canada based on information on imports provided monthly by Includes countries with exports less than or equal to 50,000 short tons in Note: Total may not equal sum of components because of independent rowsource: Bureau of the Census, U.S. Department of Commerce, "Monthly F

Table 5. Average Price of Coal Exports, September 1991 (Dollars per Short Ton)

					Year to Date			
Continent and Country of Destination	September 1991	August 1991	September 1990	1991	1990	Percent Change		
North America Total	\$33.43	\$35,18	\$31.66	624.40	400.00	· · · · · · · · · · · · · · · · · · ·		
Canada'	33.41	34.38	31.55	\$34.43	\$33.00	4.4		
Dominican Republic		36.75	36.37	34.28	32.93	4.1		
vaillaica	-	00.70	30.37	37.60	36.41	3.2		
Mexico	37.30	47.33	33.76	33.46	30.57	9.4		
Other <sup>2</sup>	34.45	34.50		44.20	36.37	21.5		
	01.40	34.30	34.50	34.47	37.61	-8.3		
South America Total	45.60	46.27	47.45	46.34	45.95	•		
Argentina	44.75	44.97	47.86	45.59		.9		
Brazil	45.71	46.42	48.06	46.64	45.54	.1		
	41.03	•	36.60	39.48	46.68	1		
Other <sup>2</sup>	•		34.35		36.91	7.0		
	2		04.00	34.66	35.86	-3.4		
Europe Total	41.01	42.39	43.50	43.24	43.77	-1.2		
Relative & Lucanta and	-	-	-	46.27	48.38			
Belgium & Luxembourg	44.11	44.81	46.18	44.97	44.90	-4.4		
Bulgaria	42.41	44.00		42.63	49.24	.1		
Denmark	32.51	31.53	36.13	33.31		-13.4		
Finland	46.12	42.93	00.10		34.51	-3.5		
France	36.94	40.24	40.66	45.33	44.72	1.4		
Ireland	37.19	41.75	40.96	40.35	42.29	-4.6		
Italy	46.61	42.85		39.64	38.60	2.7		
Netherlands	43.42	43.13	43.85	45.31	44.63	1.5		
Norway		40.10	41.99	42.99	42.80	.4		
Portugal	40.08	41.14	40.05	32.11	-	-		
Romania	40.00	41.14 46.08	40.35	40.89	41.05	4		
Spain	46.27		45.75	46.13	47.74	-3.4		
Sweden	47.51	48.41	45.77	45.33	46.50	-2.5		
Turkey	47.51	49.65	46.28	47.97	48.21	5		
United Kingdom	47.65	46.30	45.78	46.88	45.86	2.2		
Germany, FR		44.79	45.62	46.70	47.33	-1.3		
Yugoslavia	38.41	32.41	42.45	39.80	40.77	-2.4		
Other <sup>2</sup>	45.93	43.77	48.26	47.08	45.96	2.5		
	-	43.54	-	43.50	39.97	8.8		
Isia Total	43.71	40.00			00.07	0.0		
China (Taiwan)	42.05	43.38	42.64	43.43	43.08	.8		
Hong Kong	42.05	41.32	36.59	41.59	38.15	9.0		
Israel	•	37.37	40.92	38.74	38.93	5		
Japan	40.44	41.80	42.51	39.64	39.42	.6		
Korea, Republic of	43.41	43.85	43.90	43.65	44.32	-1.5		
Other <sup>2</sup>	46.98	47.75	47.33	46.31	46.34	1		
	40.82	40.24	34.45	40.51	37.91	6.8		
ceania & Australia Total	-	-	40.85	•	36.07	0.0		
frica Total	38.75	44.35	44.00	40.0:		•		
Algeria	48.75	44.35 45.29	41.36	40.91	38.51	6.2		
Egypt	70.75		48.22	46.65	46.91	5		
Morocco	34.07	45.52	46.45	45.82	45.81	•		
********	34.07	34.02	32. <b>79</b>	33.56	31.16	7.7		
• • • • • • • • • • • • • • • • • • • •	-		-	48.75				

Table 6. Steam Coal Exports, September 1991 (Short Tons)

					Year to Date	
Continent and Country of Destination	September 1991	August 1991	September 1990	1991	1990	Percent Change
North America Total	775,508	512,841	1,431,529	3,707,759	8,058,597	-54.0
Canada¹	770,529	472,535	1,372,657	3,562,224	7,794,673	-54.3
Dominican Republic	•	33,069	20,744	70,799	62,219	13.8
Jamaica	-	· -		36,503	34,127	7.0
Mexico	4,689	6.743	38.027	35,749	165,200	-78.4
Other <sup>2</sup>	290	494	101	2,484	2,378	4.5
South America Total	209	11,659	36,079	221,410	388,498	-43.0
Argentina	.112	129	<b>.</b>	1,012		
Brazil	-	11,530	-	88,519	94,281	-6.1
Chile	79	-	35.960	105,409	263,598	-60.0
Other <sup>2</sup>	18	-	119	26,470	30,619	-13.6
Europe Total	2,963,546	2,834,900	2.085.393	19.689.908		22.6
Belgium & Luxembourg	135,565	259,152	2,005,393		16,063,392	
Bulgaria	100,000	209, 102	224,037	1,428,519	1,976,620	-27.7
Denmark	759.761	417,586	269.938	3,043,060	39,065	33.3
Finland	759,701	68,890	209,930	, ,	2,282,861	33.3
France	829,674	580,724	77.655	69,106	4 000 000	445
Ireland	78,708	225,480		2,657,895	1,839,698	44.5
Italy	183,906		156,622	1,008,693	1,088,942	-7.4
Netherlands	444,635	375,633	352,718	3,856,289	3,349,229	15.1
	6,911	438,691	601,132	3,831,832	3,069,379	24.8
Norway		6,344	454444	91,975	54,841	67.7
Portugal	77,603 -	105,471 -	154,111 -	949,804 70.715	1,104,467	-14.0 -
Spain	182.612	109,234	69,336	924.625	228,060	305.4
Sweden	-		23,150	8.048	23,150	-65.2
Turkey	•	-		299	16.643	-98.2
United Kingdom	20	159,423	81.491	996,118	659.864	51.0
Germany, FR	264,151	88.078	74,603	636,749	306,299	107.9
Yugoslavia	-	00,070	. 1,000	109,954	12.995	NM
Other <sup>2</sup>	-	194	-	6,227	11,279	-44.8
Asia Total	651,354	827,255	1,039,639	6,447,761	6,132,886	5.1
China (Taiwan)	411.716	455,501	568,247	2.902.656	, ,	
Hong Kong	411,710	122,276	261		3,380,181	-14.1
Israel	<del>-</del>	57.319	79,395	464,979	119,553	288.9
Japan	239,491	190,943	315.060	432,893	584,208	-25.9
Korea, Republic of	239,491	190,943	•	2,135,262	1,490,039	43.3
Other <sup>2</sup>	147	1,216	76,388 288	501,776 10,195	556,571 2,334	-9.8 336.8
		•		·	•	
Oceania & Australia Total	39	19	137	133	1,837	-92.8
Africa Total	74,280	36,214	78,231	570,481	674,530	-15.4
Egypt	_ •	496	-	496	430	15.3
Morocco	74,280	33,705	78,231	567,972	674,100	-15.7
Other <sup>2</sup>	-	2,013		2,013	-	-
Total	4,464,936	4,222,888	4,671,008	30,637,452	31,319,740	-2.2

Source: Bureau of the Census, U.S. Department of Commerce, "Monthly Report EM 522."

MPercent change calculation not meaningful as value is greater than 500.

Based on the U.S.—Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

Includes countries with exports less than or equal to 50,000 short tons in 1990.

Note: Total may not equal sum of components because of independent rounding. Steam coal includes bituminous, subbituminous, lignite,

and anthracite.

Table 7. Average Price of Steam Coal Exports, September 1991 (Dollars per Short Ton)

					Year to Date	
Continent and Country of Destination	September 1991	August 1991	September 1990	1991	1990	Percen Change
North America Total	\$31,36	\$31.21	£20.74			
Canada'	31.33	30.71	\$29.71	\$30.69	\$30.85	-0.5
Dominican Republic	01.00		29.49	30.44	30.68	8
Jamaica	•	36.75	36.37	37.60	36.41	3.2
Mexico		-	-	33.46	30.57	9.4
Othor <sup>2</sup>	37.30	36.13	33.76	38.34	36.37	
Other <sup>2</sup>	34.45	34.50	34.50	34.47	35.38	5.4
South America Total	40.91	46.70	26.60			-2.6
Argentina	40.82		36.60	39.08	37.23	5.0
Brazil	40.02	40.64	•	35.95	_	
Chile	•	46.77	-	43.64	42.44	2.8
	41.03	-	36.60	36.59	35.72	
Other <sup>2</sup>	-	-	34.35	34.66		2.4
Furone Total			04.00	34.00	35.86	-3.4
Europe Total	35.63	37.31	38.24	37.81	00.00	
Belgium & Luxembourg	34.81	38.49	39.59		38.32	-1.3
Bulgana		-	39.39	37.04	37.66	-1.7
Denmark	32.51	31.53	-	•	48.99	_
Finland	02.01		36.13	33.37	34.51	-3.3
France	-	40.82	-	40.82		0.0
Ireland	33.95	33.63	31,46	34.15	37.18	
Italy	37.19	41.75	40.96	39.64		-8.2
	41.64	42.63	40.27	41.80	38.60	2.7
Netherlands	39.91	39.53	38.92		40.51	3.2
Norway		00.00	30.92	39.45	38.79	1.7
Portugal	40.08	41.14	**	32.11	-	
Romania	40.00	41.14	40.35	40.33	39.95	.9
Spain	00.05		-	42.64		
Sweden	33.85	43.98	34.50	34.86	34.37	4 4
Turkey		-	35.00	41.64	35.00	1.4
Turkey	. •	-		40.85		19.0
United Kingdom	-	37.56	32.66		39.30	4.0
Germany, FR	37.60	32.41		39.44	42.82	-7.9
Tudosiavia		02.41	32.29	34.43	34.63	6
Other		40.00	-	40.97	_	•
	-	40.86	-	40.79	39.97	2.0
sia Total	40.44	38.96	37.42	00.44		
China (Taiwan)	41.25	40.85		39.11	37.92	3.1
nong Kong	-	37.37	36.59	40.96	37.29	9.8
ISTACI			40.92	38.74	38.93	5
Japan	20 57	41.28	41.73	39.00	39.02	1
Korea, Republic of	36.57	34.77	37.23	36.26	38.20	-5.1
Other <sup>2</sup>	•	-	39.92	40.00	39.58	
Guioi	40.82	40.24	34.45	40.51	37.91	1.1
ceania & Australia Total	•	•	40.85			6.8
frica Total	34.02	24.40		_	36.07	-
⊏gypt	V7.UZ	34.49	32.79	33.35	31.16	7.0
Morocco	24.00	40.80	-	40.80	35.91	13.6
Other <sup>2</sup>	34.02	34.02	32.79	33.32	31.16	6.9
atal	•	40.81	_	40.81	-	0.9
otal	35.42	36.93	35.43	37.26	36.24	-
S. Total <sup>3</sup>	35.14	37.06				2.8
		37.00	35.89	37.27	36.91	1.0

¹Based on the U.S.—Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.
²Includes countries with exports less than or equal to 50,000 short tons in 1990.
³Average price of all steam coal exports.
Note: Total may not equal sum of components because of independent rounding. Average price is based on the free alongside ship (f.a.s.) value. The average prices presented in this table are considered to be representative prices for coal exports and fall within the range of \$28 to \$50 inclusively. Steam coal includes bituminous, subbituminous, lignite, and anthracite.

Source: Bureau of the Census, U.S. Department of Commerce, "Monthly Report EM 522."

Table 8. Metallurgical Coal Exports, September 1991 (Short Tons)

					Year to Date	
Continent and Country of Destination	September 1991	August 1991	September 1990	1991	1990	Percent Change
North America Total	342,448	386,056	394,909	2,592,400	3,460,522	-25.1
Canada¹	342,448	345,479 40,577	394,909	2,551,741 40,637	3,460,307	-26.3
Other <sup>2</sup>	-	-	-	22	215	-89.8
South America Total	729,093	669.919	697,396	5,550,209	4,707,106	17.9
Argentina	89,483	70,442	175.405	428,410	501.882	-14.6
Brazil	639,610	599,477	521,991	5,092,171	4,150,590	22.7
Chile	-	-	-	29,628	54,634	-45.8
Europe Total	3,628,588	3,682,818	3,119,748	29,711,340	28,405,645	
Albania	0,020,000	22,094	23,553	112.152		4.6
Belgium & Luxembourg	551,623	535.087	542.588	4.443.510	116,453	-3.7
Bulgaria	110.748	52,911	342,366		4,727,188	-6.0
Denmark	69,698	125,671	-	727,915	48,890	NM
Finland	47,909		-	430,907	55,572	NM
France	941,686	42,978	040 400	279,931	95,259	193.9
Italy	454,399	667,492	313,123	4,653,191	3,862,642	20.5
Netherlands	311.478	493,897	463,554	4,481,261	5,335,088	-16.0
Norway	5,852	373,298	398,595	3,284,719	2,993,380	9.7
Portugal	5,652	16,252	9,943	74,574	78,329	-4.8
Romania	-	57.004		74,301	257,646	-71.2
Spoin	407.000	57,891	206,716	853,387	1,521,691	-43.9
Spain	427,096	169,190	162,038	2,744,681	2,556,501	7.4
Sweden	186,000	64,441	83,295	793,504	500,678	58.5
Turkey		569,334	290,534	1,780,308	1,816,924	-2.0
United Kingdom	340,372	377,883	440,305	3,743,718	3,149,778	18.9
Germany, FR	20,343	-	108,739	375,245	590,465	-36.4
Yugoslavia	155,990	58,644	76,765	778,735	676,357	15.1
Other <sup>2</sup>	5,394	55,755	-	79,301	22,804	247.8
Asia Total	1,267,919	1,345,209	1,244,628	10,056,280	10,812,903	-7.0
China (Taiwan)	55,302	52,546	· · ·	349,440	321,370	8.7
Israel	-	76.985	54.788	109,050	54,788	99.0
Japan	883,012	876,023	806,997	7.241,223	8,044,785	-10.0
Korea, Republic of	329,605	339,655	360,106	2,356,567	2,369,223	- 5
Other <sup>2</sup>	-	-	22,737	-	22,737	
Africa Total	123,957	234,354	110,732	1,181,440	906.992	
Algeria	63,231	94,857	•			
Egypt	00,201	94,657 102,135	60,555 50.177	460,317	307,465	
Morocco	60,726	102,133	50,177	453,738	544,371	
Other <sup>2</sup>	00,720	37,362	-	161,238	51	
	-	•	-	106,147	N'	
Total	6,092,005	6,318,356	F F07 440	40 004 000		

MPercent change calculation not meaningful as value is greater than 500.

Based on the U.S.-Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

Includes countries with exports less than or equal to 50,000 short tons in 1990.

Note: Total may not equal sum of components because of independent rounding.

Source: Bureau of the Census, U.S. Department of Commerce, "Monthly Report EM 522."

Table 9. Average Price of Metallurgical Coal Exports, September 1991 (Dollars per Short Ton)

					Year to Date	
Continent and Country of Destination	September 1991	August 1991	September 1990	1991	1990	Percent Change
North America Total	\$37.88	\$40.09	\$38,28	\$38.89	\$37.64	3.3
Canada¹	37.88	39.02	38.28	38.73	37.64	2.9
Mexico		49.20	-	49.20	•	-
Other <sup>2</sup>	-	-	• •	-	49.93	• •
South America Total	45.60	46.26	48.01	46.62	46.64	*
Argentina	44.75	44.97	47.86	45.62	45.54	.2
Brazil	45.71	46.41	48.06	46.69	46.76	2
Chile	-	-	-	49.78	48.84	1.9
Europe Total	45.31	46.85	47.01	46.97	47.06	2
Albania		40.00	77.01	46.27	48.38	-4.4
Belgium & Luxembourg	46.40	47.88	48.91	47.51	47.97	-4.4 9
Bulgaria	42.41	44.00	40.31	42.63	49.44	s -13.8
Denmark	76.71	44.00	•	30.75	49.44	-13.6
Finland	46.12	46.30	•	46.44	44.70	-
France	39.57	45.98	42.94	43.74	44.72	3.8
Italy	48.62				44.72	-2.2
Netherlands	48.42	44.18	46.57	48.65	47.47	2.5
Portugal	40.42	47.37	46.63	47.12	46.91	4
Romania	•	46.08	45.75	48.11	45.79	5.1
Spain	48.21		45.75	46.51	47.74	-2.6
Sweden	47.51	48.88	49.75	48.28	48.06	.5
Turkey	47.51	49.65	49.41	48.03	48.94	-1.9
United Kingdom	47.65	46.30	45.78	46.88	45.90	2.1
Germany, FR		47.84	47.51	48.60	48.25	.7
Yugoslavia	48.99 45.00	40.77	49.41	48.89	45.02	8.6
Other <sup>2</sup>	45.93	43.77	48.26	47.08	45.96	2.5
	•	43.55	-	43.55	•	-
Asia Total	45.00	46.09	47.08	46.14	46.04	.2
China (Taiwan)	47.99	45.35	-	46.83	47.19	8
Israel		42.18	43.64	42.18	43.64	-3.3
Japan	44.07	45.83	46.50	45.67	45.45	.5
Korea, Republic of	46.98	47.75	48.90	47.65	47.95	6
Africa Total	41.59	45.87	47.42	44.77	46.16	-3.0
Algeria	48.75	45.29	48.22	46.65	46.91	-3.0 5
Egypt		45.54	46.45	45.82	45.82	5
Morocco	34.13	-		34.43	40.02	
Other <sup>2</sup>	•	48.26	-	48.90	-	-
Total	44.78	46.11	46.54	46.25	46.06	A
U.S. Total	44.61	46.39	46.70			.4
	77.01	40.33	40./U	46.33	46.31	.1

Source: Bureau of the Census, U.S. Department of Commerce, "Monthly Report EM 522."

<sup>\*</sup>For quantity data, the value of the number is less than 0.5 thousand short tons. For percentage calculations, the absolute value of the number is less than 0.05 percent.

'Based on the U.S.-Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

'Includes countries with exports less than or equal to 50,000 short tons in 1990.

'Average price of all metallurgical coal exports.

Note: Total may not equal sum of components because of independent rounding. Average price is based on the free alongside ship (f.a.s.) value. The average prices presented in this table are considered to be representative prices for coal exports and fall within the range of \$28 source: Bureau of the Census U.S. Department of Commerce Mareth. Provided to the contract of the Census U.S. Department of Commerce Mareth.

Table 10. Coal Exports by Customs District, September 1991 (Short Tons)

					Year to Date	
Customs District	September 1991	August 1991	September 1990	1991	1990	Percent Change
Eastern Total	6,839,445	6,416,654	<b>6,191,103</b> 54,033	52,079,251	<b>49,335,694</b> 54,033	5.6
Baltimore, MD	1,527,154	929,891	764,018	7,074,838	6,209,091 782	13.9
Buffalo, NY	136.038	35,186	86,214	489,314	133.325	267.0
New York City, NY	591	504	252	3,518	5,553	-36.6
Ogdensburg, NY	5.025	20,370	27.558	39,844	38,810	2.7
Philadelphia, PA	7.043	43,329	371,483	484,012	2,461,563	-80.3
Norfolk, VA	5,163,516	5,387,295	4,887,545	43.987.332	40,432,537	8.8
St. Albans, VT	78	79	-,007,040	393	-	-
Southern Total	2,542,580	3,083,670	2,126,737	19,160,081	17,209,641	11.3
Mobile, AL	617.811	999.750	478,578	6,677,524	5,956,612	12.1
Savannah, GA	147	555,755	470,070	147	-	
Miami, FL	308	326	233	1.901	935	103.3
Tampa, FL	-	020	200	11,191	18.099	-38.2
New Orleans, LA	1,818,497	1,933,356	1,486,628	11.559.996	10.085,740	14.6
San Juan, PR	1,010,407	1,500,000	1,400,020	168		
Charleston, SC	101,191	94,844	105,469	746.021	873,129	-14.6
El Paso, TX	101,101	34,044	100,400	69		
Houston-Galveston, TX	_	48,570	17,802	129,447	115,715	11.9
Laredo, TX	4,626	6,656	38,027	33,617	159,411	-78.9
Western Total	203,080	286,959	415,456	2,868,351	2,135,133	34.3
Anchorage, AK	-	-	76,388	501,482	556,571	-9.9
Nogales, AZ	•	•		<del>-</del>	2,673	40.7
Los Angeles, CA	153,672	285,542	306,243	2,083,537	1,391,843	49.7
San Diego, CA	63	87	-	1,749	3,116	-43.9
San Francisco, CA	•	847	•	33,087	99,336	-66.7
Great Falls, MT	-	-	-	<b>_</b> -	131	
Portland, OR	19	-	•	74,473	3,989	NM
Seattle, WA	49,326	483	32,825	174,023	77,474	124.6
Northern Total	970,676	751,731	1,503,550	5,575,018	10,911,452	-48.9
Chicago, IL			15,734	108	32,000	-99.7
Detroit. Ml	31.833	64,478	310,218	196,860	3,373,667	-94.2
Duluth, MN	37,617	27,551	33,627	65,168	326,129	-80.0
Pembina, ND	,	-	-	83	87	-4.6
Cleveland, OH	901,226	659,702 -	1,113,678 30,293	5,312,799 -	7,083,184 96,385	-25.0
Total	10,556,941	10,541,244	10,238,421	79,729,121	79,612,908	

Note: Total may not equal sum of components because of inde Source: Bureau of the Census, U.S. Department of Commerce,

Table 11. Coke Exports, September 1991 (Short Tons)

					Year to Date	
Continent and Country of Destination	September 1991	August 1991	September 1990	1991	1990	Percent Change
North America Total	49,053	19,083	50.469	212,413	319,033	-33.4
Canada <sup>1</sup>	37,334	6,509	44,855	147,533	240,041	-38.5
Mexico	11,719	12,407	5,594	64,030	77.964	-17.9
Other <sup>2</sup>	-	167	20	850	1,028	-17.3
South America Total	3,472	-	10,427	121,553	56.758	114.2
Europe Total	7,940	78.729	5,830	157.596	39,495	299.0
Asia Total	·	,			•	
	•	65,539	31	65,539	31	NM
Total	60,465	163,351	66,757	557,101	415,317	34.1

Note: Total may not equal sum of components because of independent rounding. Source: Bureau of the Census, U.S. Department of Commerce, "Monthly Report EM 522."

Table 12. Coal Imports, September 1991 (Short Tons)

					Year to Date	
Continent and Country of Origin	September 1991	August 1991	September 1990	1991	1990	Percent Change
orth America Total	101,332	74,156	74,724	500.040		
Canada	101,332	74,156	74,724 74,724	693,849	704,570	-1.5
Mavion		74,100	14,124	693,849	698,366	6
		-	-	•	6,204	-
a Total	285,868	174,272	95,722	1,927,090	4 400 444	
• • • • • • • • • • • • • • • • • • •	257,157	174,272	95,722	1,528,365	1,189,411	62.0
	28,711	-	00,722		1,005,042	52.1
				398,725	184,369	116.3
• • • • • • • • • • • • • • • • • • • •	-	•	130	6	5,391	00.0
	•	-	-	6	0,001	-99.9
*******	-	-	130	_	130	-
• • • • • • • • • • • • • • • • • • • •	•	-	_	_	46	-
• • • • • • • • • • • • • • • • • • • •	-	-	-	-	5,215	-
	•	_	_		•	
• • • • • • • • • • • • • • • • • • • •	-	-	_	51	· •	-
	•	_	-	1	-	-
otal			-	50	-	-
otal	•	-	23,794	31,106	22 704	
********	•	-	23,794	31,106	23,794	30.7
	387,200	248,428	•	· ·	23,794	30.7
		440,428	194,370	2,652,102	1,923,166	37.9

Percent change calculation not meaningful as value is greater than 500.

Based on the U.S.—Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

Includes countries with exports less than or equal to 50,000 short tons in 1990.

Note: Total may not equal sum of components because of independent rounding.

of components because of independent rounding.

J.S. Department of Commerce, "Monthly Report IM 145."

Table 13. Average Price of Coal Imports, September 1991 (Dollars per Short Ton)

					Year to Date	
Continent and Country of Origin	September 1991	August 1991	September 1990	1991	1990	Percent Change
North America Total	<b>\$26.52</b> 26.52	<b>\$24.20</b> 24.20	<b>\$23.26</b> 23.26	<b>\$25.52</b> 25.52	<b>\$24.46</b> 24.30 38.36	<b>4.3</b> 5.0
South America Total	<b>32.31</b> 30.87 45.22	<b>30.88</b> 30.88	<b>36.73</b> 36.73	<b>34.36</b> 32.86 40.10	<b>37.85</b> 37.29 40.89	<b>-9.2</b> -11.9 -1.9
Europe Total	• •	•. -	<b>36.35</b> 36.35	<u>.</u>	<b>37.17</b> 36.35 37.19	• •
Oceania & Australia Total	<u>.</u> -	-	<b>41.73</b> 41.73	<b>37.97</b> 37.97	<b>41.73</b> 41.73	<b>-9.0</b> -9.0
Total	31.22 30.67	28.96 29.57	32.20 32.31	32.42 <sub>.</sub> 33.11	33.68 33.77	-3.7 -1.9

'Average price of all coal imports.

Note: Total may not equal sum of components because of independent rounding. Average price is based on the free alongside ship (f.a.s.) value. The average prices presented in this table are considered to be representative prices for coal imports and fall within the range of \$20 to \$50 inclusively.

Source: Bureau of the Census, U.S. Department of Commerce, "Monthly Report IM 145."

Table 14. Coal Imports by Customs District, September 1991 (Short Tons)

					Year to Date	
Customs District	September 1991	August 1991	September 1990	1991	1990	Percent Change
Eastern Total	28,711	•	130	267,142	249,820	<b>6.9</b> -51.1
Boston, MA	-	-	130	48,855	99,853	
Portland, ME	28,711	-	•	148,652	115,011	29.3
Buffalo, NY	•	-	-	134	69	94.2
Ogdensburg, NY	-	-	-	- · · · ·	45	
Philadelphia, PA	-	-	•	69,501	34,842	99.5
Southern Total	257,157	174,272	95,722	1,660,082	984,925	68.5
Tampa, FL	233,776	174,272	95,722	1,423,508	742,311	91.8
New Orleans, LA	200,770	,		17,090	-	-
	-	-	-	· •	46	-
Wilmington, NC	23,381	-		126,338	176.072	-28.2
San Juan, PR	20,001	_	_	11,023	5,215	111.4
Houston-Galveston, TX	-	_	_	,	6,204	-
Laredo, TX		-	-	82,123	55,077	49.1
	2,147	7,145	28,883	97,450	89,034	9.5
Western Total	2,147	•,•••	,	877		-
Los Angeles, CA	-	_	23,794	31.106	23,794	30.7
Honolulu, HI	2 147	1,644	389	50,348	34,573	45.6
Great Falls, MT	2,147	5.501	4,700	15,119	30,667	-50.7
Seattle, WA	-	5,501	4,700	10,110	00,007	
Northern Total	99,185	67,011	69,635	627,428	599,387	4.7
	30,488	•	30,038	149,063	207,975	-28.3
Chicago, IL	-	-	-	. 8	•	-
Detroit, MI	_	_		211	-	-
Duluth, MN	68,697	67,011	39,597	478,146	391,412	22.2
Pembina, ND	00,037	·	· ·	•	•	
Total	387,200	248,428	194,370	2,652,102	1,923,166	37.9

Note: Total may not equal sum of components because of independent rounding. Source: Bureau of the Census, U.S. Department of Commerce, "Monthly Report IM 145."

Table 15. Coke Imports, September 1991 (Short Tons)

					Year to Date	
Continent and Country of Origin	September 1991	August 1991	September 1990	1991	1990	Percent Change
North America Total	<b>2,644</b> 2,644	<b>2,131</b> 2,131	<b>15,185</b> 15,185	<b>21,121</b> 21,121	122,423 100,636	<b>-82.7</b> -79.0
Europe Total	•	•	<u>.</u>	-	21,787 <b>39,572</b> 39.572	•
Asia Total Japan	<b>161,777</b> 161,777	<b>82,078</b> 82,078	<b>43,545</b> 43,545	<b>666,760</b> 666,760	<b>249,703</b> 249,703	1 <b>67.0</b> 167.0
Oceania & Australia Total	<b>45,326</b> 45,326	-	<b>47,533</b> 47,533	<b>189,298</b> 189,298	1 <b>82,008</b> 182,008	4.0 4.0
Total	209,747	84,209	106,263	877,179	593,706	47.7

Note: Total may not equal sum of components because of independent rounding. Source: Bureau of the Census, U.S. Department of Commerce, "Monthly Report IM 145."

## State Coal Profile: Utah

Total Area of State:	
84,916 square miles	
Area Underlain by Coal:	
15,000 square miles	
Demonstrated Reserve Base of Coal: (January 1, 1991)	
6 billion short tons (1 percent of U.S. total)	
First Year of Documented Coal Production:	
1851 (200 short tons)	
Peak Year of Coal Production:	
1990 (22 million short tons)	
1990 Coal Production:	
22 million short tons (2 percent of U.S. total)	0 50 100 Miles
1990 f.o.b. Mine Price:	Coal-Producing County
\$18.53 per short ton (U.S. average = \$21.76)	Coal-Fired Power Plant  Coke Plant
1990 Coal Consumption:	
16 million short tons (2 percent of U.S. total)	

Number of Mines (1990) Underground Surface	
Number of Miners (1990) (at mines producing more Underground Surface	re than 10,000 short ton
Average Quality of Utili	ty Coal Receipts (1990)
Sulfur Content	t ton)

Coal ranks second in value among the mineral fuels produced in Utah, following crude oil and preceding natural gas and uranium. The 22 million short tons of coal produced in 1990 were valued at more than \$400 million and accounted for about 17 percent of the total value of all mineral commodities produced in the State. More than 80 percent of Utah's coal output was from Federal coal leases. This production generated \$29 million in royalties, which were disbursed to the State and the Federal Government. In April 1991, the Utah legislature designated coal as the State rock of Utah.

Although coal deposits are widespread in Utah, production is currently from three counties in the central part of the State: Carbon, Emery, and Sevier. Mining is in the Wasatch Plateau, Book Cliffs, and Emery coalfields. These fields have sizable reserves of high quality bituminous coal in relatively thick, continuous beds. Because the coalbeds in these fields generally occur near the base of high escarpments, mine entries are driven horizontally into the coalbeds. At a few mines, however, shafts have also been dug to provide vertical access to the The bituminous coal produced in Utah generally has a heat content averaging 23 million Btu per short ton, a sulfur content of less than 1 percent (by weight), an ash content of about 10 percent, and a relatively low moisture content. Some coal in the Book Cliffs field has good coking properties and is used in blends to manufacture metallurgical coke for Utah's iron and steel industry. The leading coalbeds among the 10 currently mined are the Hiawatha, Aberdeen, Blind Canyon, and Upper Hiawatha. Together these four beds account for nearly three-fourths of the State's coal production. Bed thickness usually ranges from 4 to 12 feet, although some beds are as much as 20 feet thick.

Coal was first found in Utah around 1849 in the southwestern part of the State, near what is now Cedar City. The deposit was mined on a small scale in the early 1850's to supply coal to settlements and blacksmiths. The Coalville area in northern Utah became the State's major source of coal about 1870 with the opening of a mine to provide heating fuel for Salt Lake City. Coal development in the area was spurred by a \$1,000 reward offered in 1854 by the Territorial Legislature to the discoverer of a coal supply within 40 miles of Salt Lake City. Later, other coal deposits were discovered and developed to supply fuel for the transcontinental railroad and branch railroads constructed in Utah, and for manufacturing coke to smelt iron ore found in the State.

At the turn of the century, the output from Utah's coal mines was more than 1 million short tons. In 1920, production reached 6 million short tons under the stimulus of World War I and rising shipments of

Utah coal to other western States. In the 1930's, annual production declined to an average of less than 4 million short tons as coal markets were lost due to competition from fuel oil and natural gas, and the decline in economic activity during the Depression. In the 1940's, annual production rose to more than 7 million short tons to meet the demands of World War II and the postwar boom. By the mid-1960's, however, Utah's annual coal output dropped to about 4 million short tons, reflecting a loss of markets due mostly to the dieselization of the railroads. As a consequence, the level of Utah's coal production became largely dependent on the demand for coking coal by the iron and steel industry. Utah's coal industry was revitalized in the 1970's when the Arab oil embargo renewed interest in domestic coal reserves as sources of utility fuel. New mines were opened and existing mines expanded to supply coal mainly for new coal-fired power plants constructed in Utah. Production trended upward to a record 22 million short tons in 1990, which ranked Utah 14th among the 27 coalproducing States.

Utah's coal is mined exclusively by underground methods. Six of the 18 underground mines active in 1990 produced more than 1 million short tons each during the year, together accounting for 75 percent of the State's total coal output. The five longwall mining systems active during the year produced 53 percent of the coal. In 1990, miner productivity at Utah's coal mines averaged nearly 5 short tons per miner per hour, the highest average rate for underground coal mining in the United States. Five coal preparation plants are in operation in the State.

About 70 percent of the coal produced in Utah in 1990 was delivered to consumers in the State. Shipments out of State were chiefly to Nevada and California. Of the total coal distributed, three-fourths went to power plants. The balance was mostly for industrial use, including about 3 percent for coke plants. In addition, 2 million short tons were exported, ranking the State as the largest coal exporter in the West.

Coal consumption in 1990 totaled 16 million short tons. Power plants accounted for 14 million short tons. About 90 percent of the utility coal originated in the State and the rest was from Colorado. More than 1 million short tons of coking coal were consumed to make metallurgical coke. About half of the coking coal was mined in Utah and half was from Colorado. Other industrial users, including copper manufacturing, consumed less than 1 million short tons of coal, nearly all from Utah's mines. A small amount of fossil resin has been extracted intermittently since 1929 from the Wasatach Plateau field. The resin is used to produce adhesives, rubber, paint, thermoplastics, and varnish for printing ink. In June 1991, construction began on a

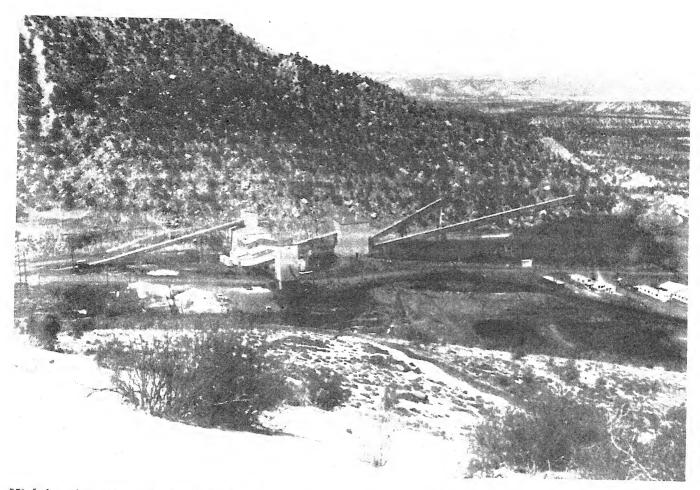
45 megawatt cogeneration plant at Sunnyside, Carbon County, that will burn waste coal from a nearby mine's 90-year accumulation. The plant will produce both electricity and steam for industrial use.

Utah's eight coal-fired power plants had a net summer capability of 4,315 megawatts at the beginning of 1991, accounting for 90 percent of the State's total generating capability. Coal's share of the total electricity generated in Utah has risen from about 90 percent in the early 1980's to 98 percent in 1990, when generation from coal was about 32 billion kilowatthours. The State's two largest coal-fired power plants are the 1,600 megawatt Intermountain Plant, operated by the City of Los Angeles, in Millard County, and the 1,185 megawatt Hunter Plant of the PacifiCorp Electric Operations, in Emery County.

Annual coal production in Utah is expected to remain at approximately 22 million short tons through 1992, with most of the output for power plants. According to studies made by the Utah Power and Light Company, in association with the Electric Power Research Institute and the State of Utah Energy Office, Utah's coal is a potential source of synthetic oil. In addition, the fossil resin is a potential feedstock for manufacturing special polymers or high-density jet fuel. Another possible energy source is coalbed methane. The coal-producing areas in the State are part of the large Uinta basin, which has a coalbed methane resource estimated between 1 and 5 trillion cubic feet.

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Utah is unique among the coal-producing States because all of its coal output is from underground mines. The mine and preparation plant shown here are located in the Wasatch Plateau field.

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